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Sequence Listing was accepted.

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Reviewer: Anne Corrigan

Timestamp: [year=2008; month=3; day=12; hr=12; min=18; sec=8; ms=730; ]

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Application No: 09813453 Version No: 1.0

Input Set:

Output Set:

Started: 2008-03-11 12:51:07.155  
Finished: 2008-03-11 12:51:10.173  
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 18 ms  
Total Warnings: 18  
Total Errors: 0  
No. of SeqIDs Defined: 77  
Actual SeqID Count: 77

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W 213	Artificial or Unknown found in <213> in SEQ ID (76)
W 213	Artificial or Unknown found in <213> in SEQ ID (77)



# SEQUENCE LISTING

<110> Yocum, R. Rogers  
Patterson, Thomas A.

<120> MICROORGANISMS AND ASSAYS FOR THE IDENTIFICATION OF  
ANTIBIOTICS

<130> OGZ-001

<140> 09813453

<141> 2001-03-20

<150> US 60/227,860

<151> 2000-08-24

<150> 09/667,569

<151> 2000-09-21

<160> 77

<170> PatentIn Ver. 2.0

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<211> 777

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<213> Bacillus subtilis

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<221> CDS

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tat cat gat gga aaa tta gaa tat cac tgg cgt ata gaa aca agc agg	96
Tyr His Asp Gly Lys Leu Glu Tyr His Trp Arg Ile Glu Thr Ser Arg	
20 25 30	

cat aaa aca gaa gat gag ttt ggg atg att ttg cgc tcc tta ttt gat	144
His Lys Thr Glu Asp Glu Phe Gly Met Ile Leu Arg Ser Leu Phe Asp	
35 40 45	

cac tcc ggg ctt atg ttt gaa cag ata gat ggc att att att tcg tca	192
His Ser Gly Leu Met Phe Glu Gln Ile Asp Gly Ile Ile Ile Ser Ser	
50 55 60	

gta gtg ccg cca atc atg ttt gcg tta gaa aga atg tgc aca aaa tac	240
Val Val Pro Pro Ile Met Phe Ala Leu Glu Arg Met Cys Thr Lys Tyr	
65 70 75 80	

ttt cat atc gag cct caa att gtt ggt cca ggt atg aaa acc ggt tta	288
Phe His Ile Glu Pro Gln Ile Val Gly Pro Gly Met Lys Thr Gly Leu	
85 90 95	

aat ata aaa tat gac aat ccg aaa gaa gta ggg gca gac aga atc gta	336
Asn Ile Lys Tyr Asp Asn Pro Lys Glu Val Gly Ala Asp Arg Ile Val	
100 105 110	
aat gct gtc gct gcg ata cac ttg tac ggc aat cca tta att gtt gtc	384
Asn Ala Val Ala Ala Ile His Leu Tyr Gly Asn Pro Leu Ile Val Val	
115 120 125	
gat ttc gga acc gcc aca acg tac tgc tat att gat gaa aac aaa caa	432
Asp Phe Gly Thr Ala Thr Thr Tyr Cys Tyr Ile Asp Glu Asn Lys Gln	
130 135 140	
tac atg ggc ggg gcg att gcc cct ggg att aca att tcg aca gag gcg	480
Tyr Met Gly Gly Ala Ile Ala Pro Gly Ile Thr Ile Ser Thr Glu Ala	
145 150 155 160	
ctt tac tcg cgt gca gca aag ctt cct cgt atc gaa atc acc cgg ccc	528
Leu Tyr Ser Arg Ala Ala Lys Leu Pro Arg Ile Glu Ile Thr Arg Pro	
165 170 175	
gac aat att atc gga aaa aac act gtt agc gcg atg caa tct gga att	576
Asp Asn Ile Ile Gly Lys Asn Thr Val Ser Ala Met Gln Ser Gly Ile	
180 185 190	
tta ttt ggc tat gtc ggc caa gtg gaa gga atc gtt aag cga atg aaa	624
Leu Phe Gly Tyr Val Gly Gln Val Glu Gly Ile Val Lys Arg Met Lys	
195 200 205	
tgg cag gca aaa cag gac ctc aag gtc att gcg aca gga ggc ctg gcg	672
Trp Gln Ala Lys Gln Asp Leu Lys Val Ile Ala Thr Gly Gly Leu Ala	
210 215 220	
ccg ctc att gcg aac gaa tca gat tgt ata gac atc gtt gat cca ttc	720
Pro Leu Ile Ala Asn Glu Ser Asp Cys Ile Asp Ile Val Asp Pro Phe	
225 230 235 240	
tta acc cta aaa ggg ctg gaa ttg att tat gaa aga aac cgc gta gga	768
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245 250 255	
agt gta tag	777
Ser Val	

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 <213> Bacillus subtilis

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His Lys Thr Glu Asp Glu Phe Gly Met Ile Leu Arg Ser Leu Phe Asp  
 35 40 45  
 His Ser Gly Leu Met Phe Glu Gln Ile Asp Gly Ile Ile Ile Ser Ser  
 50 55 60  
 Val Val Pro Pro Ile Met Phe Ala Leu Glu Arg Met Cys Thr Lys Tyr  
 65 70 75 80  
 Phe His Ile Glu Pro Gln Ile Val Gly Pro Gly Met Lys Thr Gly Leu  
 85 90 95  
 Asn Ile Lys Tyr Asp Asn Pro Lys Glu Val Gly Ala Asp Arg Ile Val  
 100 105 110  
 Asn Ala Val Ala Ala Ile His Leu Tyr Gly Asn Pro Leu Ile Val Val  
 115 120 125  
 Asp Phe Gly Thr Ala Thr Thr Tyr Cys Tyr Ile Asp Glu Asn Lys Gln  
 130 135 140  
 Tyr Met Gly Gly Ala Ile Ala Pro Gly Ile Thr Ile Ser Thr Glu Ala  
 145 150 155 160  
 Leu Tyr Ser Arg Ala Ala Lys Leu Pro Arg Ile Glu Ile Thr Arg Pro  
 165 170 175  
 Asp Asn Ile Ile Gly Lys Asn Thr Val Ser Ala Met Gln Ser Gly Ile  
 180 185 190  
 Leu Phe Gly Tyr Val Gly Gln Val Glu Gly Ile Val Lys Arg Met Lys  
 195 200 205  
 Trp Gln Ala Lys Gln Asp Leu Lys Val Ile Ala Thr Gly Gly Leu Ala  
 210 215 220  
 Pro Leu Ile Ala Asn Glu Ser Asp Cys Ile Asp Ile Val Asp Pro Phe  
 225 230 235 240  
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 245 250 255  
 Ser Val

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 <211> 250  
 <212> PRT  
 <213> Clostridium acetobutylicum

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 20 25 30

Ile Tyr Asn Asp Thr Lys Leu Thr Ala Glu Trp Arg Leu Ser Thr Asp  
35 40 45

Val Leu Arg Ser Ala Asp Glu Tyr Gly Ile Gln Val Met Asn Leu Phe  
50 55 60

Gln Gln Asp Lys Leu Asp Pro Thr Leu Val Glu Gly Val Ile Ile Ser  
65 70 75 80

Ser Val Val Pro Asn Ile Met Tyr Ser Leu Glu His Met Ile Arg Lys  
85 90 95

Tyr Phe Lys Ile Asn Pro Leu Val Val Gly Pro Gly Ile Lys Thr Gly  
100 105 110

Ile Asn Ile Lys Tyr Asp Asn Pro Lys Glu Val Gly Ala Asp Arg Ile  
115 120 125

Val Asn Ala Val Ala Ala His Glu Ile Tyr Lys Arg Ser Leu Ile Ile  
130 135 140

Ile Asp Phe Gly Thr Ala Thr Thr Phe Cys Ala Val Arg Glu Asn Gly  
145 150 155 160

Asp Tyr Leu Gly Gly Ala Ile Cys Pro Gly Ile Lys Val Ser Ser Glu  
165 170 175

Ala Leu Phe Glu Lys Ala Ala Lys Leu Pro Arg Val Glu Leu Ile Lys  
180 185 190

Pro Ala Tyr Ala Ile Cys Lys Asn Thr Ile Ser Ser Ile Gln Ser Gly  
195 200 205

Ile Val Tyr Arg Tyr Leu Arg Gln Val Lys Tyr Leu Phe Glu Lys Leu  
210 215 220

Lys Glu Asn Leu Pro Asp Gly Arg Arg Thr Arg Thr Ser Leu Val Leu  
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<210> 4

<211> 265

<212> PRT

<213> Streptomyces coelicolor

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20 25 30

Arg Arg Thr Ala Asp Glu Leu Ala Val Leu Leu Gln Gly Leu Met Gly

35

40

45

Met His Pro Leu Leu Gly Asp Glu Leu Gly Asp Gly Ile Asp Gly Ile  
 50 55 60

Ala Ile Cys Ala Thr Val Pro Ser Val Leu His Glu Leu Arg Glu Val  
 65 70 75 80

Thr Arg Arg Tyr Tyr Gly Asp Val Pro Ala Val Leu Val Glu Pro Gly  
 85 90 95

Val Lys Thr Gly Val Pro Ile Leu Thr Asp His Pro Lys Glu Val Gly  
 100 105 110

Ala Asp Arg Ile Ile Asn Ala Val Ala Ala Val Glu Leu Tyr Gly Gly  
 115 120 125

Pro Ala Ile Val Val Asp Phe Gly Thr Ala Thr Thr Phe Asp Ala Val  
 130 135 140

Ser Ala Arg Gly Glu Tyr Ile Gly Gly Val Ile Ala Pro Gly Ile Glu  
 145 150 155 160

Ile Ser Val Glu Ala Leu Gly Val Lys Gly Ala Gln Leu Arg Lys Ile  
 165 170 175

Glu Val Ala Arg Pro Arg Ser Val Ile Gly Lys Asn Thr Val Glu Ala  
 180 185 190

Met Gln Ser Gly Ile Val Tyr Gly Phe Ala Gly Gln Val Asp Gly Val  
 195 200 205

Val Asn Arg Met Ala Arg Glu Leu Ala Asp Asp Pro Asp Asp Val Thr  
 210 215 220

Val Ile Ala Thr Gly Gly Leu Ala Pro Met Val Leu Gly Glu Ser Ser  
 225 230 235 240

Val Ile Asp Glu His Glu Pro Trp Leu Thr Leu Met Gly Leu Arg Leu  
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Val Tyr Glu Arg Asn Val Ser Arg Met  
 260 265

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&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Mycobacterium tuberculosis

&lt;400&gt; 5

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Leu Ser Gly Met Lys Glu His Ala Lys Val Val Gln Gln Trp Arg Ile  
 20 25 30



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Gly	Leu	Ile	Gly	Glu	Asp	Ser	Glu	Arg	Leu	Thr	Gly	Thr	Ala	Ala	Leu	50	55	60	
Ser	Thr	Val	Pro	Ser	Val	Leu	His	Glu	Val	Arg	Ile	Met	Leu	Asp	Gln	65	70	75	80
Tyr	Trp	Pro	Ser	Val	Pro	His	Val	Leu	Ile	Glu	Pro	Gly	Val	Arg	Thr	85	90	95	
Gly	Ile	Pro	Leu	Leu	Val	Asp	Asn	Pro	Lys	Glu	Val	Gly	Ala	Asp	Arg	100	105	110	
Ile	Val	Asn	Cys	Leu	Ala	Ala	Tyr	Asp	Arg	Phe	Arg	Lys	Ala	Ala	Ile	115	120	125	
Val	Val	Asp	Phe	Gly	Ser	Ser	Ile	Cys	Val	Asp	Val	Val	Ser	Ala	Lys	130	135	140	
Gly	Glu	Phe	Leu	Gly	Gly	Ala	Ile	Ala	Pro	Gly	Val	Gln	Val	Ser	Ser	145	150	155	160
Asp	Ala	Ala	Ala	Ala	Arg	Ser	Ala	Ala	Leu	Arg	Arg	Val	Glu	Leu	Ala	165	170	175	
Arg	Pro	Arg	Ser	Val	Val	Gly	Lys	Asn	Thr	Val	Glu	Cys	Met	Gln	Ala	180	185	190	
Gly	Ala	Val	Phe	Gly	Phe	Ala	Gly	Leu	Val	Asp	Gly	Leu	Val	Gly	Arg	195	200	205	
Ile	Arg	Glu	Asp	Val	Ser	Gly	Phe	Ser	Val	Asp	His	Asp	Val	Ala	Ile	210	215	220	
Val	Ala	Thr	Gly	His	Thr	Ala	Pro	Leu	Leu	Leu	Pro	Glu	Leu	His	Thr	225	230	235	240
Val	Asp	His	Tyr	Asp	Gln	His	Leu	Thr	Leu	Gln	Gly	Leu	Arg	Leu	Val				